



# Enterprise Integration Plans

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# Agenda

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- Scenario: Net check destination
  - (Sequence diagrams)
- SOA & Web Services
- Conceptual architecture
- Portal functions
- Roadmap to implementation

# Scenario

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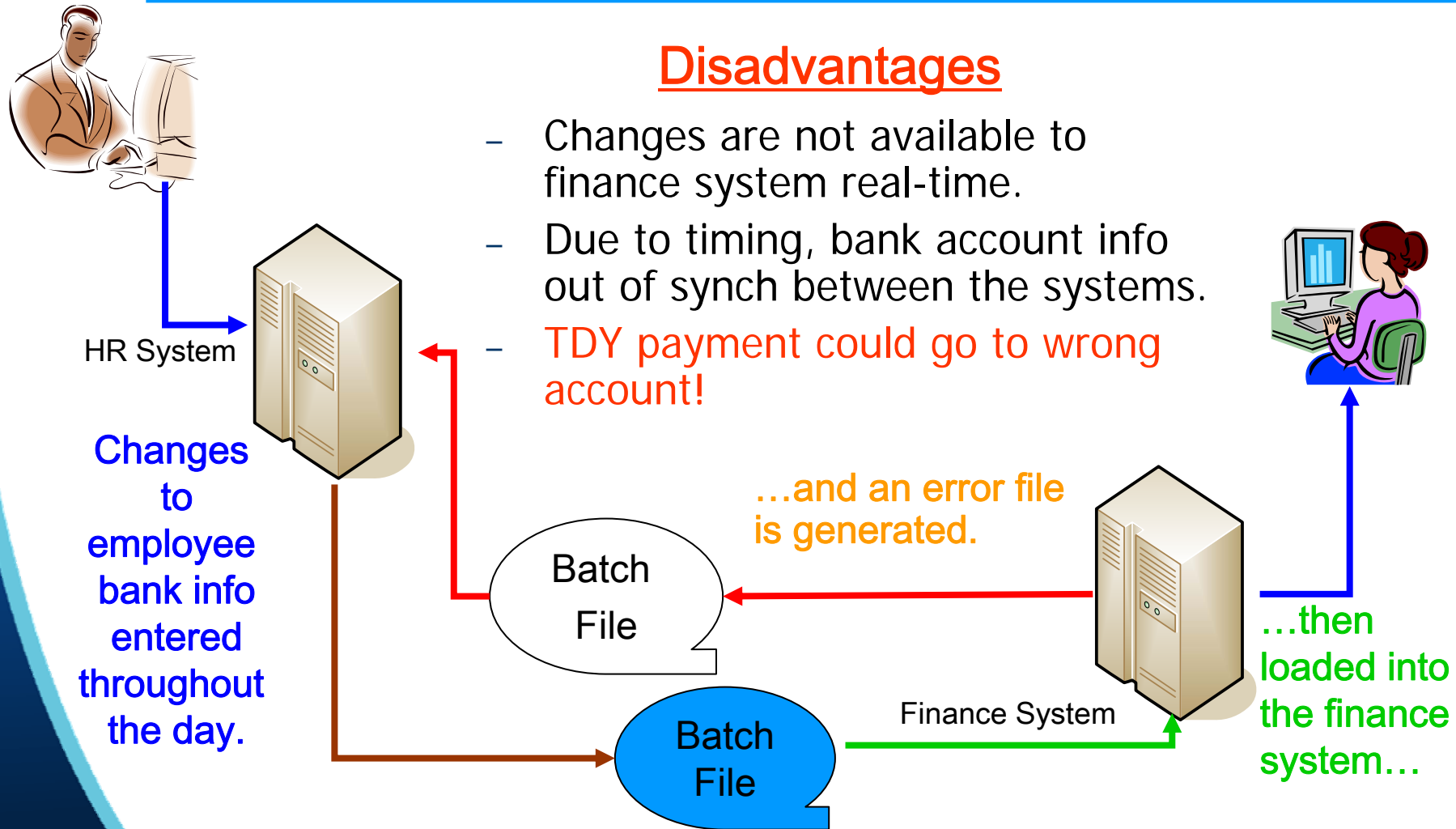
- You just came back from TDY, and you need to submit a voucher for reimbursement.
- You also just changed banks.
- You need to enter your bank account information into the personnel system.
- Will the bank account change get to the finance system in time so that your TDY reimbursement gets into your new bank account?

# Traditional Batch-File-Oriented World

## (Example using Reimbursement for TDY)

### Disadvantages

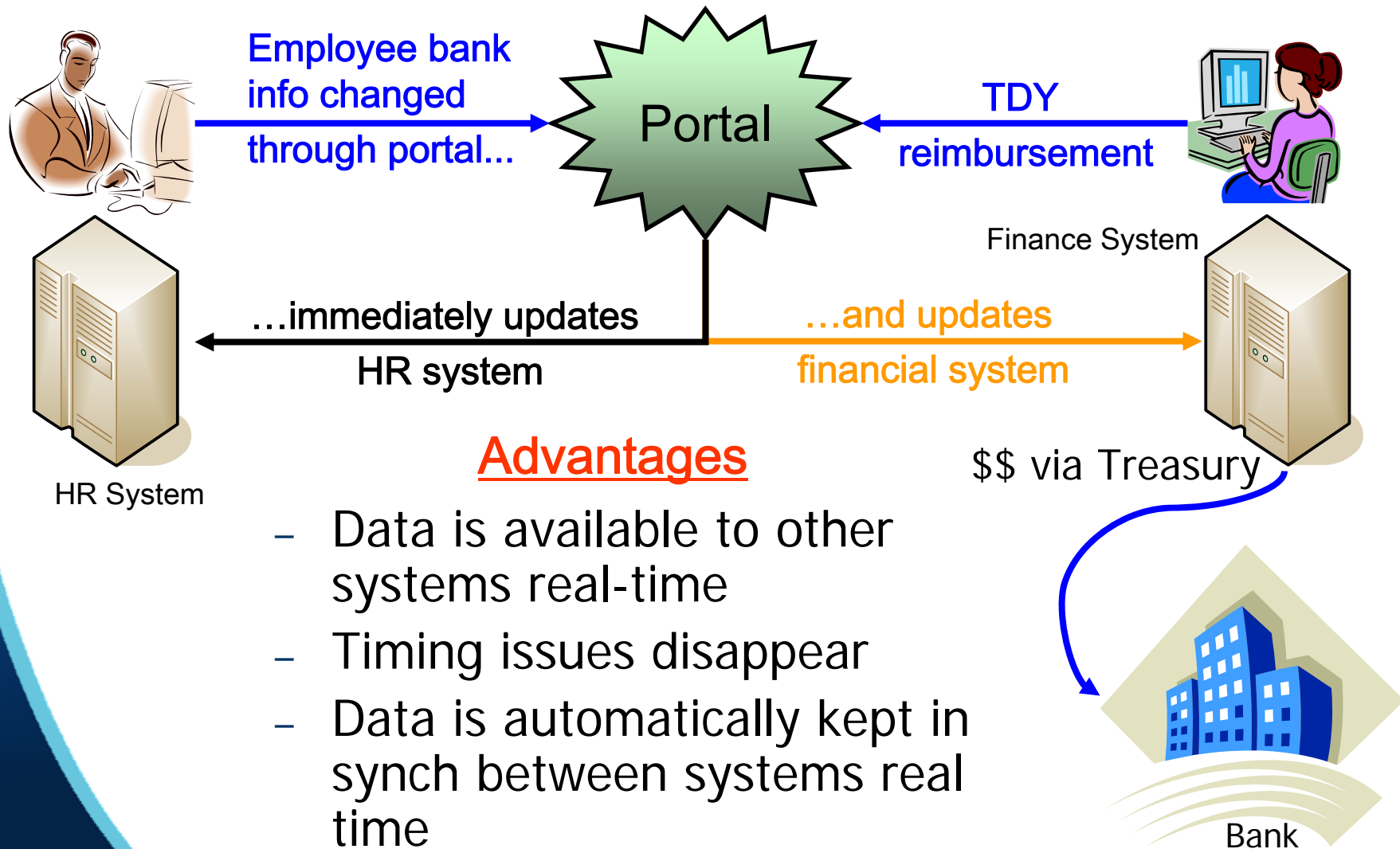
- Changes are not available to finance system real-time.
- Due to timing, bank account info out of synch between the systems.
- **TDY payment could go to wrong account!**



Nightly, a batch file is created...

# Fully Integrated, Real-Time-Oriented World

## (Example using Reimbursement for TDY)



# How Can this Be Accomplished?

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- Service Oriented Architecture (SOA)
- Portal
- Enterprise Service Bus
- Web Services for system-to-system transactions

# SOA & Web Services (1/2)

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- Service-oriented architecture
  - “In computing, the term Service-oriented architecture (SOA) expresses a software architectural concept that defines the use of services to support the requirements of software users. In an SOA environment, nodes on a network make resources available to other participants in the network as independent services that the participants access in a standardized way.” (Wikipedia)
- Web service
  - “A web service is a collection of protocols and standards used for exchanging data between applications or systems. Software applications written in various programming languages and running on various platforms can use web services to exchange data over computer networks like the Internet in a manner similar to inter-process communication on a single computer. This interoperability (e.g., between Java and Python, or Windows and Linux applications) is due to the use of open standards.” (Wikipedia)

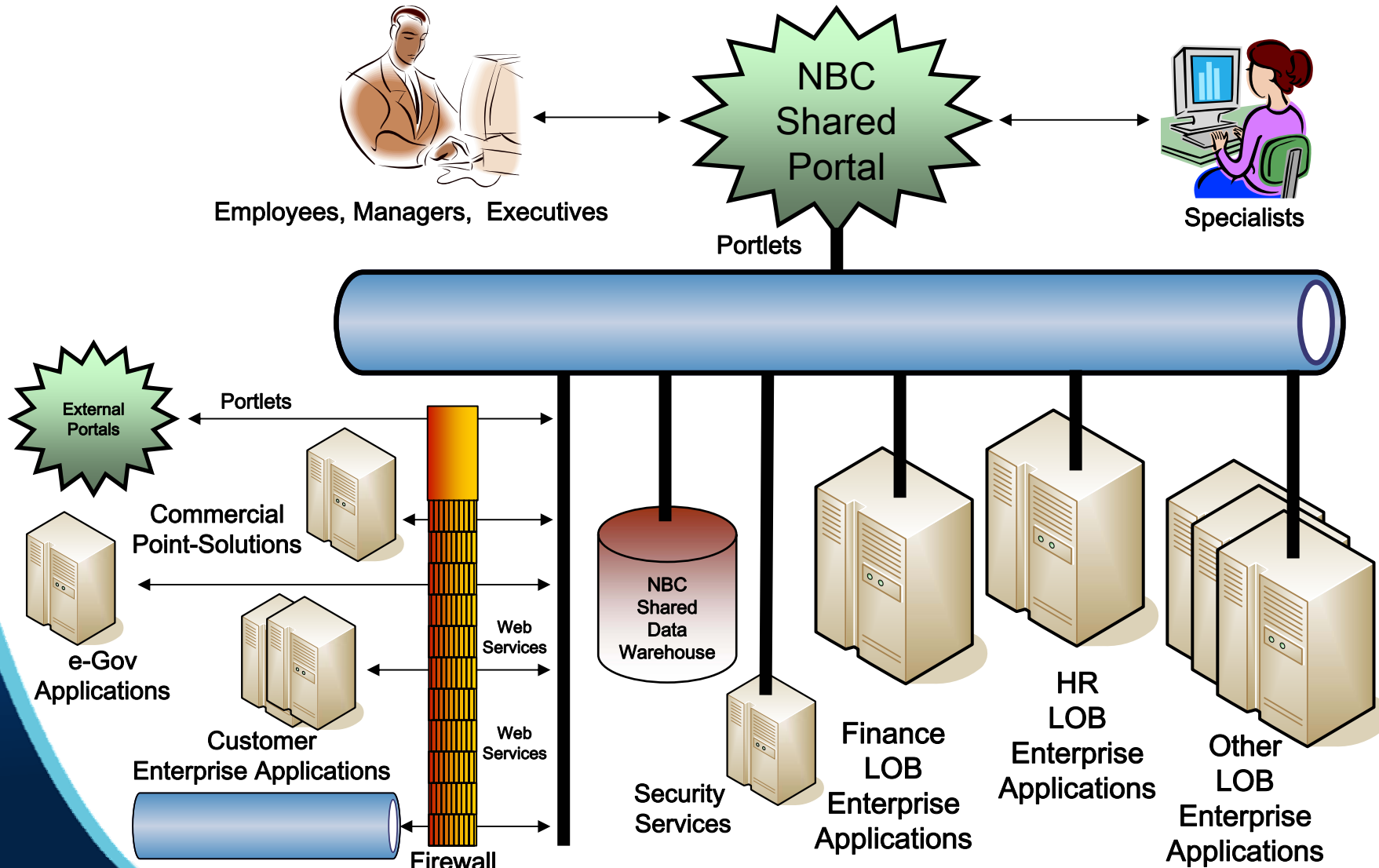
# SOA & Web Services (2/2)

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- Advantages
  - Supports both asynchronous and synchronous (real-time) interoperability
  - Independent of underlying technology
  - Standards-based
- Analogy
  - Snail mail versus e-mail
  - Batch files versus Web services



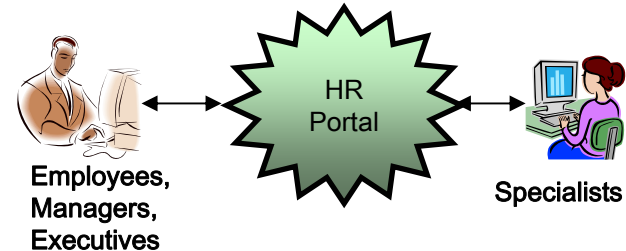
# NBC Target Enterprise Integration Environment



# Self-Service and Efficiency Will be Increased Through NBC's Portal

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- Single sign on
- Common look and feel
- Agency branding
- Integration of Best-of-Breed solutions
- Enhanced employee/manager self-service
- Expanded automated workflow



# Enterprise Integration Roadmap

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- SOA study by IBM
- SOA Proof-of-Concept Project
- FPPS Web Services gateway deployment
- Financial systems participation